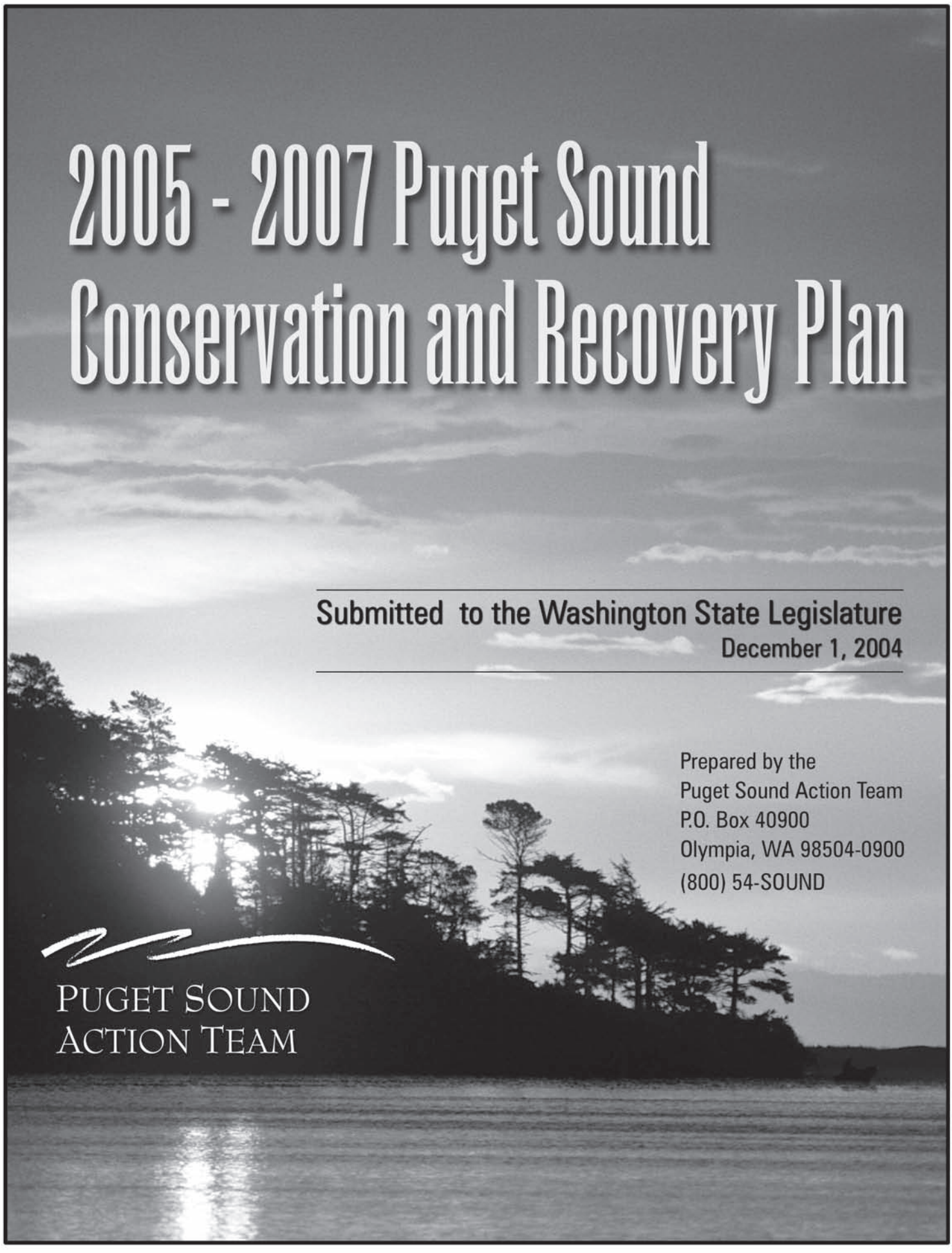

2005 - 2007 Puget Sound Conservation and Recovery Plan

Submitted to the Washington State Legislature
December 1, 2004

Prepared by the
Puget Sound Action Team
P.O. Box 40900
Olympia, WA 98504-0900
(800) 54-SOUND

PUGET SOUND
ACTION TEAM

Puget Sound Action Team Partners

Puget Sound Action Team
The Puget Sound Action Team is the state's partnership for Puget Sound. The Action Team Partnership defines, coordinates, and puts into action the state's environmental and sustainability agenda for the Sound. Representatives from the following groups serve on the Action Team:

Local Government

- **Joan McGilton**, City of Burien, *city council member representing Puget Sound cities*
- **Dan McShane**, Whatcom County, *county council member representing Puget Sound counties*

Washington State Government

- **Juli Wilkerson**, Director, Community, Trade and Economic Development
- **Mark Clark**, Executive Director, Conservation Commission
- **Valoria Loveland**, Director, Department of Agriculture
- **Linda Hoffman**, Director, Department of Ecology
- **Jeffrey Koenings**, Director, Department of Fish and Wildlife
- **Mary Selecky**, Secretary, Department of Health
- **Francea McNair**, Aquatics Land Steward, Department of Natural Resources
- **Doug MacDonald**, Secretary, Department of Transportation
- **Laura E. Johnson**, Director, Interagency Committee for Outdoor Recreation
- **Rex Derr**, Director, Parks and Recreation Commission

Tribal Government

- **Daryl Williams**, Tulalip Tribes, *representing Puget Sound Tribes*

Federal Government (Ex-officio)

- **Bob Lohn**, NOAA Fisheries
- **Ron Kreizenbeck**, U.S. Environmental Protection Agency
- **Ken Berg**, U.S. Fish and Wildlife Service

Chair

- **Brad Ack**, director,
  Puget Sound Action Team

Puget Sound Council
The Puget Sound Council includes representatives from business, agriculture, the shellfish industry, environmental organizations, local and tribal governments and the legislature, and it provides advice and guidance to help steer the Action Team.

Council Members

- **Rep. Mark Schoesler**, *representing the Washington State House of Representatives*
- **Rep. Phil Rockefeller**, *representing the Washington State House of Representatives*
- **Sen. Pam Roach**, *representing the Washington State Senate*
- **Sen. Karen Fraser**, *representing the Washington State Senate*
- **Doug Mah**, Councilmember, City of Olympia, *representing city government*
- **Scott McCreery**, BP Cherry Point Refinery, *representing Business*
- **Bill Dewey**, Taylor Shellfish Co. Inc., *representing the shellfish industry*
- **Rhea Miller**, San Juan County Commissioner, *representing county government*
- **Naki Stevens**, People for Puget Sound, *representing the environmental community*
- **Jerry Van der Veen**, Dairy Farmer, *representing Agriculture*
- **David Herrera**, Skokomish Tribe, *representing tribal governments*

Chair

- **Brad Ack**, director,
  Puget Sound Action Team

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Publication No. PSAT04-15

STATE OF WASHINGTON
PUGET SOUND ACTION TEAM
OFFICE OF THE GOVERNOR
P.O. Box 40900 • Olympia, Washington 98504-0900
(360) 725-5444

December 1, 2004

To: All those interested in the future of Puget Sound

I am pleased to present the *2005-2007 Puget Sound Conservation and Recovery Plan* on behalf of the Puget Sound Action Team and the Puget Sound Council. I am formally submitting this plan to the governor and the Washington State Legislature for consideration as they develop the state's budget and priorities for the coming biennium.

The Puget Sound ecosystem is home to a magnificent array of life, including 200 species of fish, 26 kinds of marine mammals, 100 species of sea birds, and thousands of species of marine invertebrates and plants. However, steep increases in the region's human population and our use of natural resources and development of land for the past half century have all placed serious stresses on the Sound's natural systems.

Significant declines in populations of salmon, orcas and certain species of marine birds and fish, closures of shellfish beds, and a growing dead zone in Hood Canal are all warning signals that the very best of Puget Sound is still at risk. The building blocks of a healthy environment in Puget Sound—clean water, healthy and connected habitat and an intact food web—continue to erode. The Action Team's *2004 State of the Sound Report* (available in January 2005) reports in greater detail on the significant challenges Puget Sound's environment still faces.

The Puget Sound Action Team partnership comprises state agencies, local and tribal governments, federal agencies and diverse private sector interests. We work collectively to develop and carry out a coordinated conservation agenda for Puget Sound. The *2005-2007 Puget Sound Conservation and Recovery Plan* details that agenda, including the work to be undertaken, results expected, and the budgets needed.

The *2005-2007 Puget Sound Conservation and Recovery Plan* focuses on seven core priorities, which address critical threats to the ecosystem:

- Clean up contaminated sites and sediments.
- Reduce continuing toxic contamination and prevent future contamination.
- Reduce the harm from stormwater runoff.
- Prevent nutrient and pathogen pollution caused by human and animal wastes.
- Protect shorelines and other critical areas that provide important ecological functions.
- Restore degraded nearshore and freshwater habitats.
- Conserve and recover orca, salmon, forage fish and groundfish.

While this plan details only the work of the state agencies, the Action Team recognizes that protecting and restoring Puget Sound requires all levels of government and the private sector to work together effectively. Every day, thousands of people in local governments, tribal governments, federal agencies, the business sector, the environmental community and individual citizens lend their energy and creativity to the conservation challenges in Puget Sound. By clearly describing the state's proposed agenda in Puget Sound, we hope that all of our partners will be able to better plan their efforts and to see where we have opportunities for collaborative and complementary work in a broader partnership.

After the legislature approves a budget for the 2005-2007 biennium, the Action Team will issue a final work plan based on that budget.

I look forward to working with all of you for a cleaner and healthier Puget Sound. Thank you for your continuing commitment to Puget Sound and the environment of Washington.

Sincerely,

Brad Ack
Chair

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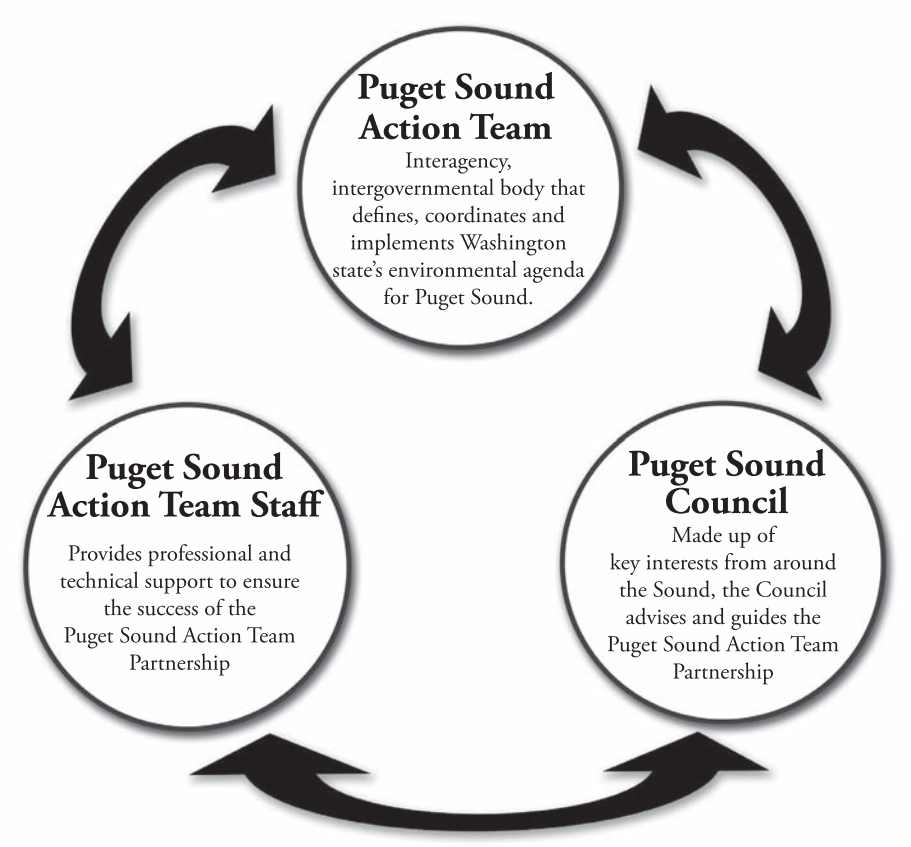
APPENDIX: Detailed Budget Information by Agency

In the Appendix the Action Team agencies and university programs listed below have provided more detailed information to describe the activities and expected results to be accomplished with funding proposed under the *2005-2007 Puget Sound Conservation and Recovery Plan.* To get a copy of the appendix, go to http://www.psat.wa.gov/Publications/priorities_05/Priorities_05_review.htm or call (800) 54-SOUND.

Introduction



The Puget Sound Action Team (Action Team), created in law in 1996, is the state's partnership for Puget Sound, charged with defining, coordinating and putting into action the state's environmental protection and restoration agenda for the Sound. The Action Team partnership is made up of state agencies and federal, tribal and local government representatives. The Puget Sound Council, which advises the Action Team, is composed of diverse interest groups, state legislators and tribal and local government representatives. The Action Team partnership has adopted this *2005-2007 Puget Sound Conservation and Recovery Plan* as its strategic plan and budget for the 2005-2007 biennium. In developing this plan, the Action Team looked across the spectrum of issues that threaten the health of Puget Sound and set priorities to guide the partnership's work in the Sound. This document identifies those priorities, the partnership's strategies and the measurable results the partnership will work to achieve in 2005-2007.

The appendix presents the specific activities and budget proposals for the Action Team state agency and university partners. The *2005-2007 Puget Sound Conservation and Recovery Plan* will be submitted to the governor and then the state legislature as they develop and approve the final state budget for Puget Sound.

The *2005-2007 Puget Sound Conservation and Recovery Plan* is the Action Team's fifth biennial work plan to implement the *Puget Sound Water Quality Management Plan*, a long-term comprehensive plan

adopted by the state and federal governments to protect and restore Puget Sound.

Creating the *2005-2007 Puget Sound Conservation and Recovery Plan*

The Action Team partnership began development of the plan by identifying the highest priorities for its collective work in Puget Sound:

- Clean up contaminated sites and sediments.
- Reduce continuing toxic contamination and prevent future contamination.
- Reduce the harm from stormwater runoff.
- Prevent nutrient and pathogen pollution caused by human and animal wastes.
- Protect shorelines and other critical areas that provide important ecological functions.
- Restore degraded nearshore and freshwater habitats.
- Conserve and recover orca, salmon, forage fish and groundfish.

Note: *The Action Team has not ranked any priority over the others in importance.*

Selection of each Puget Sound priority was built upon the foundation of best available scientific knowledge. Studies by scientists from federal, state, local and tribal governments, as well as universities, colleges, environmental organizations and citizen groups have all provided information about the condition of the Puget Sound ecosystem and the impact of human activities.

The next step in development of this plan was to identify strategies and results expected for each priority. In developing strategies, the Action Team partnership selected from among an array of tools, including research, technical assistance, regulation, education and public involvement, enforcement, funding, and demonstration projects, to choose those that would best deliver progress on each priority.

The strategies and desired results presented in this document reflect the best thinking of Action Team partner agencies, the Puget Sound Council and other interested parties. Continuing research and monitoring planned for in the 2005-2007 biennium will allow us to evaluate the effectiveness of our efforts.

The Action Team partnership then issued a draft of the *2005-2007 Puget Sound Priorities* for public comment in February and March of 2004. Comments received generated a number of improvements in the document, large and small.

Following public comment, agency and university partners used the priorities, strategies and results to develop their agency activities and budgets during the summer of 2004. During that process, Action Team partner agencies provided target numbers, where appropriate, for the results, as well as detailed information on activities and budgets they propose to achieve those results. An appendix of budget detail provides links between agency activities, proposed work plan budgets, and results under the priorities.

The results outlined in this work plan are those to be delivered by state agency and university education partners. We recognize that this emphasis does not allow adequate reflection of the significant contributions of local, federal, tribal and private partners toward progress in protecting and restoring Puget Sound. While we cannot include the work of all involved entities in the document, we do encourage local, federal, tribal and non-governmental partners in Puget Sound to use the priorities, strategies and results contained herein as a guide for their planning, and to help coordinate our collective efforts to protect and restore the Sound.

This plan reflects extensive analysis and public input, is consistent with individual agency strategic plans and budget proposals, and offers a coordinated

approach by the state to achieve significant and measurable progress on the highest priorities for Puget Sound. As the governor and the legislature work together in the winter of 2005 to decide where to invest limited state resources, the *2005-2007 Puget Sound Conservation and Recovery Plan* will provide guidance on how invested resources will benefit Puget Sound.

Prevention vs. Restoration: Investing Our Limited Dollars

During the 2004 public review of the *2005-2007 Puget Sound Priorities*, Action Team partners asked the public to comment on the relative importance of the seven priorities. One of the emerging themes from the commenters was about the relative weight the Action Team partnership should give to prevention of pollution and degradation versus the restoration of already polluted or degraded waters and habitats. While most reviewers recognized that both prevention and restoration are critical to securing the Puget Sound ecosystem for future generations, a number of comments specifically stressed the importance of preventing further degradation.

Preventive actions were favored for several reasons, including their relative cost-effectiveness and the fact that protecting an existing area generally results in more environmental benefit than trying to replace or rebuild that area's environmental functions after they are altered or destroyed. Further, it is technically easier and cheaper to prevent contamination of water than to clean up polluted waters or to protect existing shorelines and fish habitat versus creating new habitat. In addition, preventing damage is critical because the damage can be irreversible.

The push for preventive approaches can come into conflict with concerns expressed by members of the public about environmental regulations that affect people's rights to develop lands. These conflicts, when not resolved, can ultimately limit funding for preventive programs such as regulatory enforcement and compliance, monitoring to detect and correct problems in their early stages, and public education. Thus, working hard to resolve conflicts between protection of public resources and private property rights must be a high priority for the Action Team partnership's work in the Sound.

The Role of the Action Team Partnership for 2005-2007

Long-term goal: Provide the state's institutional framework to lead and coordinate the protection and restoration of Puget Sound.

In response to the challenges facing Puget Sound, the Washington State Legislature in 1996 created the Puget Sound Action Team as the successor to the Puget Sound Water Quality Authority, to work as the state's partnership to protect and restore Puget Sound and its spectacular diversity of life, now and for future generations. The Action Team partnership organizes its work around three goals:

1. Protect and restore Puget Sound's water quality.
2. Protect and restore habitat for all native species in Puget Sound.
3. Protect the biological resources of Puget Sound and recover species at risk, including orca, salmon and marine fish.

The Action Team partnership works to define, coordinate and implement the state's environmental agenda for Puget Sound. The partnership is made up of three interrelated entities.

The Action Team is a 17-member governing body that includes directors from 10 state agencies, representatives from three federal agencies, one representative of tribal governments, two representatives of local governments (city and county), and a chairperson appointed by the governor.

The Puget Sound Council provides guidance to the Action Team and reviews its progress, and is made up of seven representatives of leading Puget Sound interests, including tribal governments, counties, cities, agriculture, the environmental community, the shellfish industry and the business community, four

representatives of the Washington State Legislature, and the chairperson of the Action Team.

The Puget Sound Action Team staff provides professional and technical services to help the partner agencies and others in their efforts to protect, restore and sustain Puget Sound.

Strategies for the Puget Sound Action Team Partnership, Puget Sound Council and Action Team Staff for 2005-2007

1. Define, coordinate, and implement the state's environmental protection and restoration agenda for Puget Sound.
2. Bring interagency and intergovernmental strategic thinking, communication and action to bear on Puget Sound's existing and emerging conservation needs. Choose between and develop specific strategies and

courses of action, evaluate effectiveness of those strategies and actions, and build upon success.

3. Engage and involve Puget Sound local and tribal governments, state agencies, organizations and citizens in efforts to protect and restore Puget Sound through a variety of outreach projects, programs and education efforts.

Desired Results for the Puget Sound Action Team Partnership, Puget Sound Council, and Action Team Staff for 2005-2007

A. Puget Sound Action Team Partnership

1. Activities are well managed and successfully implemented to achieve measurable and meaningful progress on priorities in the 2*005-2007 Puget Sound Conservation and Recovery Plan.*
2. A report on the Action Team Partnership's progress in implementing the *2005-2007 Puget Sound Conservation and Recovery Plan* is submitted to the governor, the legislature and the public by December 2006.
3. Priorities are adopted for Puget Sound for the 2007-2009 biennium and, with the advice of the Puget Sound Council, a Puget Sound work plan and proposed budget for the 2007-2009 biennium is prepared, approved and submitted to the governor and the legislature.

B. Puget Sound Council

1. The Puget Sound Council assesses the work of the partnership on a continuous basis and makes recommendations for improvements and new areas and ways of engagement.
2. The Council actively creates linkages to the key constituencies represented on the Council to improve collaboration and partnership opportunities and to improve information flow and communication in all directions.

C. Puget Sound Action Team Staff

1. Action Team staff members function as an effective advocate for Puget Sound and its existing and emerging conservation needs.
2. Outreach, technical assistance and funding for Public Involvement and Education (PIE) projects are provided to local and tribal governments, businesses, trade associations, environmental and community groups, and interested individuals and organizations. PIE projects will reach 65,000 citizens with education directed at behavior change and to raise awareness around priorities.
3. The Puget Sound community is provided with accurate, relevant and accessible information on the status of the Puget Sound ecosystem, issues related to the health of the ecosystem, and activities of the Puget Sound Action Team and Council.
4. Action Team staff monitor current and emerging conservation and environmental issues in Puget Sound, track and participate in significant policy and program development in Puget Sound, seek and promote practical solutions to environmental problems, and work to find alternatives to activities and projects that may harm Puget Sound's marine and freshwater environment.
5. Action Team staff support and coordinate the work of the Puget Sound Action Team partnership and the Puget Sound Council.

Local Stewards are Key to the Plan's Success:

Public Education and Involvement is Part of all Priorities

The Action Team partnership believes that involving and educating the people who live, work, do business and recreate around Puget Sound in efforts to protect and restore the Sound is critical to achieving the results in this work plan. There are literally thousands of Puget Sound residents actively working to protect and restore resources, educate their neighbors and effect positive changes in businesses, other institutions, and in local, state, tribal and federal government.

The *2005-2007 Puget Sound Conservation and Recovery Plan* supports and relies upon a diversity of public involvement and education programs. Examples include:

- Washington Sea Grant Program and Washington State University Extension water quality field agents work with residents in five Puget Sound counties.
- Washington Sea Grant and State Parks educate boaters about clean boating practices and work with marinas and others to prevent small oil spills.
- Department of Ecology involves residents through water cleanup plans, watershed planning, and nonpoint pollution, stormwater and shoreline programs.
- Department of Fish and Wildlife and the Interagency Committee for Outdoor Recreation support numerous volunteer habitat restoration projects.
- Department of Health educates the public on shellfish protection and on-site sewage system maintenance.
- Department of Natural Resources involves the public in processes to designate and manage aquatic reserves throughout the Sound.
- Department of Agriculture educates and assists residents in managing pesticides and reducing invasive species to protect habitat and water quality.
- Conservation Districts work with rural residents to improve land management and habitat.
- Department of Community, Trade and Economic Development holds workshops and develops resource materials for local citizens, elected officials, and local planners.
- PSAT's Public Involvement and Education (PIE) program provides funds to community-based education programs that involve thousands of residents.
- Action Team outreach, communications and technical staff provide resources and work to educate and involve the public in all Puget Sound counties.

While public education is not listed as one of the core priorities of the Action Team partnership, the partners agree that *progress on each core priority depends on increased education and public involvement* to build public support for environmental protection and to expand a stewardship ethic throughout Puget Sound.

Priority 1: Clean up contaminated sites and sediments


Department of Ecology

Long-term goal: All sediments exceeding state standards for contamination are cleaned up.

The Issues

Many persistent toxic chemicals that are discharged to Puget Sound, such as polychlorinated biphenyls (PCBs), polyaromatic hydrocarbons (PAHs), dioxins and mercury, bind to sediments at concentrations far above natural conditions. They tend to accumulate in the tissues of living organisms and can build up and move up in the food web, resulting in damaging toxicity.

Although some present day activities continue to release these chemicals, current pollution control practices are far better than practices before existing environmental laws came into force. The wastes from 100 years of uncontrolled or poorly controlled dumping and discharges were left in hundreds of upland, groundwater, and sediment sites in the Puget Sound basin.

In 1988, agencies in Puget Sound completed the Puget Sound Dredged Disposal Analysis and adopted comprehensive testing requirements and limits on dredged material allowed for disposal at unconfined open water sites. Washington State passed the Model Toxics Control Act (MTCA), the state's contaminated site cleanup law, in 1989. The Department of Ecology (Ecology) adopted comprehensive sediment management standards for Puget Sound in 1991.

Today, large portions of Puget Sound's 1.8 million acres of submerged land sediments show some form of chemical or biological degradation. As of July 2003, Ecology has identified more than 5,700 acres as contaminated because they exceed the Washington State sediment management standards. Ecology and the Environmental Protection Agency (EPA) have scheduled 2,874 of those acres in about 110 sites for remediation because they exceed cleanup triggers. The remaining contaminated acreage may naturally recover without remediation if the sources of contamination are controlled. Ecology continues to assess in-water sediments for contamination. From July 2003 to June 2004 Ecology evaluated over 4,500 acres of sediment for source control, cleanup, or constructive purposes.

Contaminated underwater sediment sites occur primarily in the Sound's major urban bays, including Commencement, Elliott, and Bellingham bays, Sinclair Inlet, and other water bodies with extensive histories of industrial activities. The contaminated sites on land are widely scattered, as were the oil storage facilities, dry cleaners, creosote plants, and other activities that caused the contamination.

Action Team Partnership's Proposed Strategy for 2005-2007

1. Continue to remediate the identified cleanup sites.
2. Manage navigation dredging operations to clean up contaminated areas whenever possible and prevent contamination of unconfined disposal sites.

Desired Results for Clean Up of Contaminated Sites and Sediments in 2005-2007

A. Sites are cleaned up
   1. The total number of acres of contaminated sediments that are remediated under the authority of Ecology increases by 80 acres. This represents 2.8 percent of the acres scheduled for cleanup as of July 2003, the same pace of cleanup targeted for the 2003-2005 biennium.
   2. Number of upland site cleanups completed through Superfund and MTCA increases by 760 sites. This represents at least 8 percent of known number of cleanup actions.
   3. Complete two (2) corrective actions at state High Priority Hazardous Waste Facilities. This represents 10 percent of state high priority corrective action sites.

B. In-water sites are managed and moved towards cleanup
   1. Five thousand (5,000) acres are evaluated to assess whether cleanup is needed.
   2. The Department of Ecology's inventory of contaminated sediment sites is updated by review of information on patterns of sediment contamination and degradation.
   3. The Department of Natural Resources (DNR) identifies and addresses contaminated sites on state-owned aquatic lands (tidelands and bedlands).
      a. All known contaminated sediment sites and any accompanying institutional controls are identified on state-owned aquatic lands.
      b. A strategy to address areas affected by accumulation of woody debris in association with log transport, storage and processing is developed and implemented for state-owned aquatic lands.
      c. All contaminated sites that are remediated by capping on state-owned aquatic lands under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and MTCA receive proprietary use authorizations (through leases or other actions) from the DNR.

C. The public is informed
   1. A comprehensive presentation of all known contaminated sediment sites, their size, key contaminants, status and expected date for remediation to be completed is available to the public.

D. Monitor progress
   1. Source controls at cleaned sites are effective as shown in an evaluation of longer term monitoring data from a sample of sites.

Priority 2: Reduce continuing toxic contamination and prevent future contamination

Long-term goal: Reduce and eventually eliminate harm from toxic pollutants entering Puget Sound.

The Issues

The layers of contaminated underwater sediments and the number of upland sites scheduled for cleanup (see Priority 1) reveal the history of toxic pollution in Puget Sound. However, continuing discharges of toxic substances into Puget Sound still threaten the Sound's rich marine diversity. For example, seals and other marine mammals in Puget Sound have high levels of polychlorinated biphenyls (PCBs) and other toxics. The Puget Sound Ambient Monitoring Program tracks how many fish develop liver lesions associated with toxic contamination. Juvenile salmon from rivers with contaminated bays show higher levels of toxics than fish from clean estuaries. Scientists have documented events during which adult salmon returning to certain urban streams died before they could spawn.

Although some toxic compounds have been banned, continuing sources of toxics into Puget Sound include industrial and municipal discharges and stormwater, oil spills, hazardous material spills, air deposition (which also contributes to stormwater pollution), seepage from hazardous sites on land, illegal discharges and dumping activities. *The Environmental Protection Agency's Toxics Release Inventory reported that in 2001 over 879,000 pounds of toxic chemicals were released to the water and over 7.7 million pounds of toxic chemicals were released to the air in the Puget Sound basin.*

Toxics are widespread in Puget Sound but there are geographic differences in ongoing sources. For example, nearly all of the businesses in the Elliott Bay/Duwamish area are connected to the King County Metro sewer system and their wastewater discharges are treated and discharged through deep outfalls. However in Commencement Bay, Sinclair Inlet, Port Townsend, and other areas there are 90 industries with individual permits and outfalls. Each outfall may have an historic or continuing sediment hot spot. In addition, 117 sewage treatment plants operated by Puget Sound local governments discharge millions of gallons of treated wastewater under National Pollutant Discharge Elimination System (NPDES) permits issued by Washington Department of Ecology (Ecology).

Another source of toxic pollution is oil spills. Catastrophic oil spills are most likely along the main oil tanker routes from the ocean to the major Puget Sound refineries, and from other large commercial vessels including oil barges. The most common direct source of small to mid-sized oil spills that enter the water directly are oil transfer operations between vessels and facilities. Another important source is highway spills, such as from tank trucks that occur on land and drain to Puget Sound. A significant oil spill occurred on December 30, 2003 during an oil transfer operation when a barge being loaded at a major Puget Sound marine terminal spilled about 4,800 gallons of heavy fuel oil into Puget Sound. Only two weeks later on January 15, 2004 there was a large release of transformer oil containing PCB from a Columbia River dam.

While this later release did not occur in Puget Sound, it illustrates the ongoing threat posed by hazardous material spills, including persistent bioaccumulative toxins (PBTs). An oil spill on October 14, 2004, in Dalco Passage in central Puget Sound demonstrated the need to strengthen the region's response to spills from unknown sources in adverse conditions.

Increasingly, the toxics settling out of air pollution are recognized as a potentially large contributor to toxic contamination of Puget Sound waters. Air pollution from local sources is concentrated along transportation routes and areas with many residential heating sources. There is also some evidence of cross-Pacific transport of air toxics.

Action Team Partnership's Proposed Strategy for 2005-2007

1. Reduce the use of hazardous chemicals by continuing to implement the persistent bioaccumulative toxins (PBT) strategy.
2. Reduce the loading of other substances by using a variety of best management practices and improved treatment methods.
3. Continue to place a priority on actions to prevent and respond to oil and hazardous material spills.

Desired Results for Reducing Continuing Toxic Contamination and Preventing Future Contamination in 2005-2007

A. Toxic loadings are reduced
    1. Reduce total statewide releases of air toxics as identified by the Toxics Release Inventory by 5 percent over the biennium. [1]
    2. The number of 25 to 10,000 gallon spills decreases to 35 and the volume of oil reaching surface waters from these spills decreases to 30,000 gallons.
    3. Amount of reclaimed water in Puget Sound increases by 2 million gallons per day during the course of the biennium. The treatment design capacity at 11 Puget Sound facilities was 7.45 million gallons per day in 2003.

B. State agencies control sources of contamination
    1. Department of Agriculture (Agriculture) investigates, reports and enforces actions for all referred complaints about possible pesticide misuse.
    2. Agriculture collects 60,000 pounds of unusable, cancelled or suspended pesticides in its waste pesticide program, the same rate of collection achieved in July 2003 to June 2004.
    3. Department of Natural Resources (DNR) characterizes and evaluates 100 percent of dredge spoils for the potential suitability of beneficial re-use, dispersive open water disposal, non-dispersive open water disposal on state-owned aquatic lands, or removal to an approved disposal facility if testing and review determine that it is unsuitable for the above options.
    4. Through state aquatic land transactions, DNR identifies sites that may have excessive wood debris accumulations and initiates appropriate sampling investigations in coordination with Ecology to determine the need for remedial action on at least 10 percent of those sites.
    5. By June 2007, NPDES permits for 85 percent of municipal sewage treatment plants have been renewed, or newly issued within the past five years, a reduction in permit backlog from 20 percent to 15 percent.

[1] This target only provides an indirect indication of potential change in Puget Sound contamination. Air toxics strategies and performance measures are based on inhalation and public health risk. Decreases in their release to the air will provide some undetermined level of benefit to Puget Sound.

6. By June 2007, NPDES permits for 85 percent of industrial permits have been renewed or newly issued within the past five years, a reduction in permit backlog from 20 percent to 15 percent.
7. The percent of large commercial vessels having incidents that can lead to oil spills is reduced by 5 percent.
8. Ecology responds to 95 percent of all spill incidents within 48 hours of their being reported to Ecology.

C. Plans to reduce toxics are developed

1. PBT strategy and chemical-specific action plans are implemented.
   a. One chemical action plan is completed during the 2005-2007 biennium.
   b. The mercury cleanup plan is implemented.
2. Ecology completes ____ toxic-focused water quality cleanup plans or technical studies during the biennium. (Ecology will provide target numbers in June 2005 that will appear in the final 2005-2007 work plan.)
3. Ecology's Technical Resources for Energy Efficiency (TREE) program completes evaluations that suggest quantifiable waste reductions for six industrial facilities in the Puget Sound basin during the biennium.

D. The public is informed and involved

1. Citizens, business owners, licensed pesticide applicators, and others receive education, training, and technical assistance to adopt behaviors and take actions to reduce toxic pollution.
2. At least 125 marinas in Puget Sound and 1,500 boaters and fishers are reached by an educational effort to reduce small spills aimed at commercial fishers, boaters, and marinas and harbors that serve them.

E. Monitor progress and develop models

1. Sufficient monitoring data are collected and made available to support activities to control toxics.
2. DNR develops the scope for a mass-balance model for toxic metal and organic contaminants in Puget Sound.
3. Environmental monitoring requirements for combined sewer overflow (CSO) outfalls are implemented on state-owned aquatic lands.

Priority 3: Reduce the harm from stormwater runoff

Long-term goal: Improve management of stormwater runoff and reduce combined sewer overflows to meet water quality standards in all waters of the basin.

The Issues

Stormwater runoff comes from rain or snow that falls on streets, parking areas, rooftops and other developed land that subsequently flows directly into Puget Sound or is routed there through drainage systems, streams, and rivers.

Stormwater runoff causes two major problems. First, *when stormwater runoff moves over developed land it picks up and transports pollutants to receiving waters. This pollutant mix may include oil, grease, heavy metals, pesticides and other toxic chemicals, sediment, bacteria, and nutrients.* The Washington Department of Ecology (Ecology) estimates that of all the impaired water bodies identified for cleanup plans under the Clean Water Act, approximately one-third are impaired by stormwater runoff. These pollutants carried by stormwater runoff degrade the quality of surface waters, restrict harvesting in shellfish growing areas, harm or kill fish and other wildlife, limit recreational opportunities, contribute to sediment contamination in urban bays, and have the potential to pollute groundwater supplies.

The second major problem of stormwater runoff is the degradation or loss of habitat caused by increases in the volume of the runoff from developed lands. In native forests of the Pacific Northwest, researchers estimate that less than one percent of rain or snow becomes surface runoff. Most of the precipitation infiltrates to the ground, is taken up by plants, or evaporates. When forests and prairies are cleared and replaced by streets, parking lots and buildings, hydrology is completely changed, surface runoff increases dramatically, and becomes stormwater runoff. Without adequate controls, increased stormwater flows overwhelm stream channels, causing undercutting and erosion of stream banks, depositing excessive sediment, and altering in-stream fish and wildlife habitat. *The federal services have identified habitat loss due to stormwater runoff as one of the factors limiting our ability to recover salmon species listed under the Endangered Species Act.*

Action Team Partnership's Proposed Strategy for 2005-2007

1. Expand the regulatory program of National Pollutant Discharge Elimination System (NPDES) stormwater permits.
2. Increase the use of innovative techniques known as low impact development.
3. Continue development of local comprehensive stormwater programs.
4. Manage runoff from state highways according to the updated highway runoff manual.
5. Continue to reduce the number and volume of combined sewer overflow (CSO) events to Puget Sound.

Desired Results to Reduce the Harm from Stormwater Runoff in 2005-2007

A. Water quality impairment from stormwater is improved
   1. Improved water quality conditions and less restrictive shellfish harvest classifications in one shellfish growing area threatened or degraded by stormwater runoff.
   2. Eighty (80) percent of the 10 Puget Sound jurisdictions with CSOs meet the milestones in their CSO reduction plans, such as implementing CSO reduction activities.

B. Permits and programs to manage stormwater are expanded
   1. Ninety (90) percent of the 80 to 85 jurisdictions that need a municipal stormwater permit have obtained a permit that includes provisions for monitoring and reporting.
   2. The number of local governments adopting the elements of the Puget Sound comprehensive local stormwater program increases by 20 percent during the biennium. Based on 38 responses to a 2004 survey of jurisdictions, 80 percent of counties and 82 percent of cities had adopted at least half of the elements.
   3. Use authorizations for stormwater outfalls issued by the Department of Natural Resources (DNR) are coordinated with regulatory permitting agencies to provide for modeling of known potential impacts and long-term monitoring on state-owned aquatic lands.
   4. Ecology staff carry out stormwater inspections at 500 construction sites.
   5. Ecology staff carry out stormwater inspections at 600 industries.

C. The use of low impact development stormwater practices is increased
   1. Credits for low impact development techniques in the *Stormwater Management Manual for Western Washington* are updated based on monitoring data and evaluations made available by January 2007.
   2. Four local governments adopt ordinances that allow for or encourage the use of low impact development techniques. This represents an increase of about 20 percent.

D. Runoff from state highways is managed
   1. Ninety (90) percent of state highway construction sites are prepared for the wet season by having in place effective erosion and sediment control best management practices. This represents an improvement of approximately 20 percent as measured by Washington State Department of Transportation (WSDOT) for 32 moderate and high-risk projects from July 2001 to June 2003.
   2. One stormwater retrofit for existing impervious surfaces is completed on a prioritized outfall from a state highway where high-volume traffic drains to sensitive water bodies.
   3. Runoff treatment and flow control best management practices to mitigate the impacts of new impervious surface are implemented as part of transportation construction projects.

E. The public is informed and involved
   1. At least 3,100 homeowners, vehicle owners, members of the real estate and development community, and state, tribal and local government staff increase

their knowledge, skills and motivation to change behaviors and practices to reduce contamination and volume of stormwater runoff. This will include awarding 12,000 clock hours to real estate professionals.

2. Sixty-six (66) percent of local governments will provide public education and involvement opportunities to citizens. This represents an increase from the current level of about 55 percent.

F. Monitor progress

1. Municipal NPDES stormwater permits will include effectiveness monitoring.

Priority 4: Prevent nutrient and pathogen pollution caused by human and animal wastes

Long-term goal: Reduce nutrient and pathogen pollution from human and animal waste to meet water quality standards in all Puget Sound waters.

The Issues

Protecting and restoring clean water is critical to human and environmental health in Puget Sound. In recent decades, human and animal waste has polluted streams, wetlands, groundwater, and marine waters. A significant number of the water bodies on the Department of Ecology's (Ecology) list of polluted water bodies violate standards for bacterial pollution.

Clean water is particularly important to the rich and abundant shellfish resources of Puget Sound, and is key to preserving Washington State's position as the nation's leading producer of farmed bivalve shellfish. Because shellfish are harvested for human consumption, the waters in which they grow must meet stringent bacterial standards. From 1995 to 2004, pollution control efforts by state agencies, local governments, tribes, industry groups and citizens have restored approximately 8,000 more acres of commercial shellfish beds than were downgraded during the same period. From July 2003 to June 2004, 2,852 acres were moved from more restrictive to less restrictive classifications for harvest. *Approximately 30,000 acres of shellfish beds remain restricted or prohibited for commercial and recreational harvest, out of an estimated 165,000 acres of total classified acreage.*

Cleaning up polluted waters and preventing future contamination from wastes involves the management of sewage treatment facilities, onsite sewage systems, and other nonpoint, or diffuse sources of bacteria and nutrients such as boating and animal-keeping facilities. More than100 sewage treatment plants are operated by Puget Sound local governments and discharge millions of gallons per day of treated wastewater into the Sound.

At the same time, individuals and businesses in the Puget Sound region own and operate an estimated 472,000 onsite sewage systems permitted by local health agencies. Many of these systems are aging and are poorly maintained, and the technology used in many newer systems requires regular care. Systems that do not work properly present health risks and can contaminate ground and surface waters with nutrients, pathogens, and other contaminants.

Large onsite sewage systems (over 3,500 gallons-per-day capacity) are regulated by the Department of Health (Health) or Ecology and are operated by a variety of public and private entities.

Action Team Partnership's Proposed Strategy for 2005-2007

1. Focus Action Team partnership efforts and resources geographically, in high risk locations such as Hood Canal, in threatened or contaminated shellfish harvest areas, and in streams where state and local partners can carry out water clean up plans and shellfish restoration strategies to reduce loadings.
2. Provide technical assistance and funding to strengthen local programs in data management, public education, monitoring,

and corrective actions, especially in high-risk locations.

3. Assist local jurisdictions in finding solutions to increase landowner compliance with onsite sewage system maintenance and animal waste management practices through education and regulated inspection.
4. Continue to emphasize preventing pollution to protect the environment and human health in regulatory, technical assistance, and management activities.

Desired Results to Reduce Nutrient and Pathogen Pollution from Human Sewage and Animal Wastes in 2005-2007

A. Pollutant loads are reduced
   1. Shellfish growing area improvements:
      a. Improved water quality conditions result in less restrictive shellfish harvest classifications for 1,000 acres.
      b. Improved water quality conditions and less restrictive harvest classifications in two of the 18 shellfish growing areas threatened or degraded by concentrations of onsite sewage systems.
   2. Fecal coliform loading to Hood Canal from the Skokomish River (measured at the Highway 106 Bridge) is reduced by 44 percent compared to the baseline established in 2000. The fecal coliform loading to Hood Canal from the Union River is reduced by 34 percent over the course of the biennium.
   3. Gallons of boater waste collected at pumpouts due to State Parks education and boater waste facilities increases by 5 percent during the biennium, based on an annual estimate of approximately 1.5 million gallons collected from June 2003 to June 2004.

B. State and local efforts improve watershed health
   1. The Department of Ecology (Ecology) completes ___ nutrient, dissolved oxygen, and fecal coliform-focused water quality cleanup plans on an annual basis. (Ecology will provide target numbers in June 2005 that will appear in the final 2005-2007 work plan.)
   2. Eight (8) restoration projects are conducted in commercial shellfish areas identified as "threatened."
   3. Five (5) percent of the "threatened" commercial shellfish growing areas from the prior year's Early Warning List are no longer identified as "threatened."

C. Management of onsite sewage disposal systems
   1. By June 30, 2007, Puget Sound local health jurisdictions complete risk-based management plans for onsite sewage systems, as required by revised State Board of Health rules, and begin their implementation.
   2. The number of local health jurisdictions able to create geographic information system (GIS) maps to evaluate and manage concentrations of onsite sewage systems located adjacent to water bodies impaired by fecal or nutrient loadings increases from three to eight of the 12 Puget Sound jurisdictions.[2]
   3. Health tracks long term management of large onsite sewage systems (LOSS) under the Operating Permit Program provided in revised State Board of Health rules.
   4. At least 90 percent of Puget Sound large Concentrated Animal Feeding Operation (CAFO) facilities will be in compliance with Washington Department of Agriculture rules by the end of the

[2] Achieving this goal will require additional financial and technical resources. The Department of Health will continue to actively work with the Puget Sound Action Team staff, local health jurisdictions, and others to implement this data collection goal.

biennium.

5. Conservation Districts approve and implement 200 best management practices on small non-commercial livestock operations.
6. Conservation Districts approve and implement 100 best management practices on larger livestock operations that meet the definition of Animal Feeding Operations (AFOs), and 100 best management practices on Concentrated Animal Feeding Operations (CAFOs).
7. Conservation Districts complete 240 approved conservation plans. From 2003 to 2004 Puget Sound Conservation Districts completed 24 plans.
8. Five (5) boater waste facilities are installed or replaced in Puget Sound through funding from the Washington State Parks and Recreation Commission.

D. The public is informed and involved

1. At least 1,650 homeowners and boaters in Hood Canal will increase their knowledge, skills, and motivation to change their behaviors and practices to improve their management of onsite sewage systems, vessel holding tanks, pet and livestock waste.
2. Throughout Puget Sound, citizens engage in public education and involvement opportunities that change behavior and result in actions to reduce nutrient and pathogen pollution and to increase beneficial uses of state waters, including the safe harvest of shellfish.

Hood Canal: A Geographic Priority for 2005-2007

Hood Canal is one of the most scenic marine environments of Puget Sound; it was also once one of the most productive. It's been long renowned for its excellent commercial and sport fishing and shellfish harvesting. Boaters, divers, birdwatchers, and hikers are drawn to its natural beauty and recreational opportunities.

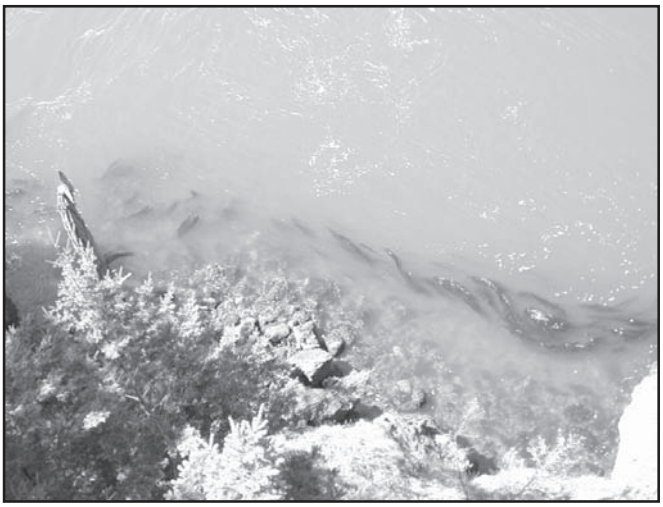
Now Hood Canal's health is at serious risk from hypoxia, a lack of dissolved oxygen caused in part by excessive nutrients in the water that lead to algae blooms. This problem hit the spotlight in the spring of 2002 and again in the fall of 2003 when dead fish and other marine life washed up on Hood Canal beaches, having essentially suffocated. During 2004, the canal's oxygen levels have dropped to all-time lows.

In May 2004, the Puget Sound Action Team (Action Team) staff and Hood Canal Coordinating Council completed a study that quantified the contribution of human activities to nitrogen loading in the Canal at between 100 to 300 tons of nitrogen annually. The sources of this nitrogen include human sewage (60 percent), livestock manure (14 percent), chum salmon carcass disposal (13 percent), stormwater runoff (11 percent), forestry activities (1 percent), and discharges from sewage treatment plants (less than 1 percent). These numbers are preliminary and will be revised as data from further monitoring and analysis become available.

The report also recommended ways to control the main sources of nitrogen pollution and the Action Team partnership is currently working with Hood Canal jurisdictions on an array of preventive and corrective activities. This work will continue to be a focus in the 2005-2007 biennium; results can be found throughout the priorities in this plan that will contribute to improving the situation, and partner agencies have additional efforts not incorporated into this plan. Action Team partner agency efforts in the coming biennium include enforcement, continuing science, planning for watersheds and water cleanup, funding for, and direct implementation of, diverse management and corrective actions efforts and public outreach and education.

Further study of the hypoxia problem in Hood Canal will also continue throughout the biennium, led by a consortium that includes the University of Washington, Ecology, WDFW, the Hood Canal Salmon Enhancement Group, the U.S. Geological Survey and others. This intensive three-year monitoring and modeling effort will further inform corrective actions in the future. For more information visit http://www.psat.wa.gov/Programs/hood_canal.htm and http://www.prism.washington.edu/hcdop/index.html.

Priority 5: Protect shorelines and other critical areas that provide important ecological functions



Long-term goal: Preserve the ecological processes that create and maintain marine and freshwater habitats and minimize losses in ecological function and area of these habitats within the Puget Sound basin.

The Issues

Puget Sound population growth and the resulting increases in agricultural, forestry and urban activities have modified natural shorelines and other critical areas and impaired the ecological functions they provide. Evidence of ecosystem damage can be found in the high incidence of closed shellfish harvest areas, the list of polluted water bodies, the salmon populations listed under the Endangered Species Act, the disappearance of forage fish and eelgrass in areas of shoreline modification, changes in stormwater flows in urban areas, and studies correlating high quantities of impervious surfaces with degraded shoreline and aquatic habitat.

The primary tool government has to protect the environment as growth occurs is to ensure that development is well planned and orderly through regulation of development and enforcement of these regulations. In 1971 the Washington State Legislature passed the Shoreline Management Act to regulate shoreline activities, and in 1990 passed the Growth Management Act (GMA) to provide the tools to ensure that growth occurs in an orderly manner.

All Puget Sound jurisdictions will be updating their growth management plans and ordinances by the end of 2005 to include best available science, especially as it applies to the protection of anadromous fish such as salmon. Part of best available science includes the use of landscape scale information to understand the implications of planning and regulatory decisions. Over the next decade Puget Sound jurisdictions will update their Shoreline Master Programs (SMP) to be consistent with revised guidelines that will help preserve remaining nearshore habitat from the damaging effects of shoreline modification.

While the regulatory approach is essential as the region accommodates a growing population, many communities are working to permanently preserve key marine and freshwater properties through acquisition or conservation easements. Because there are so few remaining high value areas, the functions they provide are vitally important to supporting ecosystem recovery. Citizens, businesses, farmers, tribes, and local governments have come together through local land trusts and in partnership with regional and national conservation groups to identify high value properties and seek landowners willing to cooperate in preserving these lands. Local governments have adopted tax incentive programs such as the Public Benefit Rating System and Conservation Futures taxing programs to support this approach.

From July 2003 to June 2004 these groups permanently protected 533 acres of riparian habitat, 1,124 acres of freshwater wetlands, and the habitat-forming processes of five Puget Sound

shoreline drift cells through land acquisition. In addition, the Washington Department of Natural Resources (DNR) placed 22.17 acres of aquatic land under permanent protection and the Washington Department of Fish and Wildlife (WDFW) purchased 230 acres of high value shoreline and critical area properties.

Action Team Partnership's Proposed Strategy for 2005-2007

1. Help achieve effective critical areas ordinance updates, other growth management and Shoreline Master Program updates through funding, technical assistance, data and comment.
2. Work with state agencies, local governments, and other partners to conserve shorelines and other critical areas through a variety of conservation tools.
3. Work at the local level to integrate regulatory and conservation approaches in implementing watershed and salmon recovery plans.
4. Prevent the introduction of new aquatic nuisance species in Puget Sound, in part through volunteer activities.

Desired Results to Protect Shorelines and Other Critical Areas that Provide Important Ecological Functions in 2005-2007

A. Habitat is conserved
   1. Increase the number of acres of ecologically important land permanently protected and properly managed through the course of the biennium. This will be accomplished through DNR aquatic reserves, WDFW land acquisition (fee-simple and conservation easements), land acquisitions funded by grants administered by the Interagency Committee on Outdoor Recreation (IAC), and oil spill Natural Resources Damage Assessments administered by Ecology.
   2. Aquatic reserves and other withdrawn areas are evaluated, designated and managed by DNR on state-owned aquatic lands.

B. Protections are improved
   1. Snohomish County, Whatcom County, the City of Port Townsend, and the City of Bellingham update their SMPs to new guidelines by December 1, 2005. Other jurisdictions funded for SMP updates as early adopters will be on schedule for this biennium or soon after.
   2. Island, Mason, San Juan, and Skagit counties update their critical areas ordinances to include best available science to protect eelgrass and kelp beds, forage fish spawning habitat, and shellfish growing areas by December 1, 2005.
   3. DNR in collaboration with WDFW protects 100 percent of eelgrass beds and herring spawning areas within areas of geoduck tracts where wild stock geoduck are being harvested on state-owned aquatic lands.
   4. A statewide seagrass management and conservation plan is developed by DNR involving local, state and federal agencies, tribes, private tideland owners and other interests to create an agreed-upon consistent approach for conservation, mitigation, restoration and monitoring to protect this critical resource and/or its functions.
   5. A report with recommendations for managing ballast water is submitted to the legislature by December 2006.
   6. A statewide strategy for coordinating land acquisition and disposal by state agencies is implemented as directed by the legislature based on a June 30, 2005 report by the IAC.

7. No new aquatic nuisance species are introduced, and the spread of existing species, such as spartina, is minimized.
8. Ecoregional planning is used as a tool to identify critical ecologically important lands and marine areas.

C. Technical assistance is provided to local governments
1. A computer-based tool for conducting landscape analysis to assess projects and sub-basin areas is developed to assist local governments in protecting shorelines and other critical areas.
2. Local governments receive technical information and assistance with comprehensive planning decisions and permits related to wetlands.
3. Local governments and organizations receive technical assistance for creating and monitoring locally adopted marine protected areas.
4. Local governments receive guidance regarding best available science to protect the functions, values and processes of marine riparian and nearshore resources.
5. Central and south Sound counties receive assistance to assess the feasibility of creating Marine Resource Committees outside of the Northwest Straits Initiative structure.

D. The public is informed and involved
1. Citizens receive technical information and assistance on wetlands restoration and stewardship in the context of voluntary actions, as well as regulatory actions related to shoreline management and federal permitting activities.
2. Shoreline landowners, consultants, and developers receive education and technical assistance to promote alternatives to traditional "hard" methods of shoreline modifications that allow the shoreline to maintain natural processes.
3. At least 1,350 local government staff, real estate professionals, developers, and citizens increase their knowledge, skills, and motivation to change their behaviors and practices to better protect shorelines and other ecologically critical areas, including restoration and stewardship voluntary actions. This will include awarding 2,400 clock hours to real estate professionals.

E. Monitor progress
1. As part of a long-term program to monitor eelgrass condition, DNR tracks status and trends in eelgrass extent in Puget Sound yearly, and completes focus studies in two regions.
2. DNR expands its eelgrass monitoring to study linkages between eelgrass bed dynamics and stressors.
3. DNR tracks status and trends in floating kelp abundance throughout Puget Sound as part of a long-term monitoring program.
4. DNR develops a strategic monitoring plan for all authorized activities on state-owned aquatic lands in collaboration with the Puget Sound Ambient Monitoring Program, the Comprehensive Monitoring Strategy and other monitoring efforts.
5. DNR tracks biodiversity in intertidal biotic communities in central and southern Puget Sound and completes collaborative research with University of Washington on processes related to observed patterns in intertidal biodiversity.

Priority 6: Restore degraded nearshore and freshwater habitats

Long-term goal: Achieve a net gain in ecological function and area of streams, nearshore, and estuarine habitats within Puget Sound.

The Issues

Changes to landscapes along Puget Sound's shorelines and within its watersheds in the past 150 years resulted in the loss of thousands of acres of productive and diverse aquatic habitats. Habitat loss and degradation occurs in streams, riparian areas, floodplains, estuaries, wetlands, and marine shorelines throughout Puget Sound basin. These habitats support many species throughout their life histories.

Declining water quality associated with the loss and degradation of upstream habitats threatens shellfish harvesting in Puget Sound. Increased development of river floodplains and marine shorelines requires management of new flood and landslide hazards. The greatest losses have occurred in areas of high population density and areas associated with major infrastructure such as roads, dams, and levees. An example of dramatic habitat loss is in the urbanized central Puget Sound basin as a result of stream diversion and channel restrictions, shoreline armoring, over-water structures and filled wetlands.

Current restoration theory suggests that restoration efforts should be focused on recovery of underlying natural processes. Restoration projects that create and maintain habitats by recovering processes such as bluff erosion, over-bank flooding and sedimentation are likely to be successful because they will continue to function over time and will contribute to the creation or enhancement of various habitats across the landscape influenced by the affected processes. Implementing this type of restoration requires a new level of cooperation and collaboration across the region.

Action Team Partnership's Proposed Strategy for 2005-2007

1. Work together to apply the best scientific principles to improve the performance of process-based restoration projects.
2. Implement the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP) to plan and undertake large-scale restoration initiatives. Ensure PSNERP complements and coordinates with other restoration efforts, including the Puget Sound and Adjacent Waters program, the Northwest Straits Commission, salmon habitat restoration through the Salmon Recovery Funding Board, and other efforts.
3. Control aquatic nuisance species, including implementing a rapid response plan should any new species be detected.

Desired Results for Restoring Degraded Nearshore and Freshwater Habitats in 2005-2007

A. Restoration projects improve habitat
   1. Projects to restore natural habitat forming processes increase the area of tidally and seasonally influenced estuarine wetlands by 3,500 acres over the course of the

biennium. This represents an increase of approximately 115 percent based on a total of 817 acres restored from July 2003 to June 2004.

2. Projects to restore riparian habitat improve conditions and processes on 1,000 acres of Puget Sound shorelines, estuaries, rivers and streams.
3. Efforts to restore and protect the natural delivery of sediment and organic matter improve the natural functions of two Puget Sound drift cells by the end of the biennium.
4. Reduce the area of Puget Sound infested by *Spartina* spp. by 15 to 20 percent consistent with the Department of Agriculture's 2001 *Spartina* Management Plan for North Puget Sound. This represents a reduction in *Spartina* infestations from 760 to approximately 630 solid acres located primarily in the waters of Island, Skagit, and Snohomish counties.
5. The Department of Natural Resources coordinates and assists with identifying and funding of collaborative restoration efforts with local, state, and federal entities on state-owned aquatic lands.
6. Riparian habitat protected by the Conservation Reserve Enhancement Program (CREP) increases by 1,200 new acres and 65 new stream miles. From 2003 to 2004 approximately 110 acres and 17 stream miles were added to the CREP program in Puget Sound.

B. Puget Sound Nearshore Ecosystem Restoration Project creates a new approach for restoration in Puget Sound

1. Partners complete a feasibility report and pursue enactment of an approach for implementing strategic, large-scale projects to restore processes that create and sustain nearshore habitats.
2. Process-based restoration objectives identified by PSNERP partners are explicitly considered in all large-scale mitigation projects, natural resource damage assessment decision documents, and waterfront redevelopment projects affecting Puget Sound's nearshore environments.
3. Washington Department of Fish and Wildlife (WDFW) and partners provide technical support to restoration feasibility programs for Capitol Lake, Burlington Northern Santa Fe Railroad, and other priority, large-scale restoration activities.
4. WDFW and the Department of Ecology, in collaboration with partner agencies, develop and demonstrate pilot mechanisms to optimize the environmental benefits derived from environmental impact mitigation.

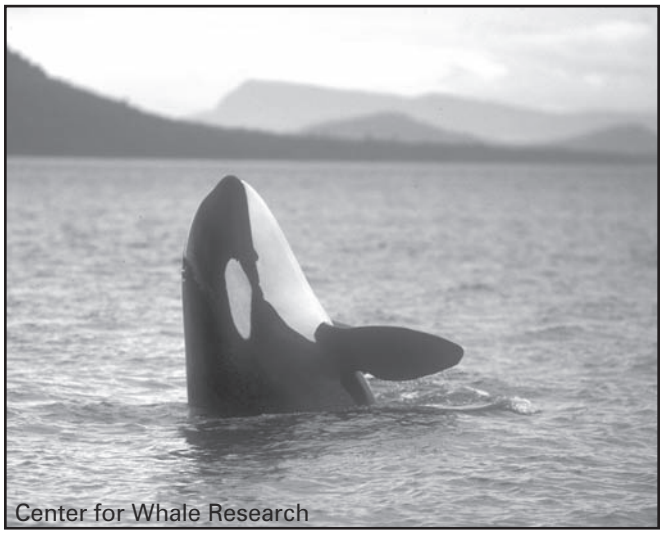
C. The public is informed and involved

1. At least 650 planners, natural resource agency staff, real estate professionals, developers, volunteers and landowners will increase their knowledge, skills and ability to advise others in the restoration of degraded shoreline, nearshore and freshwater habitats. Actual restoration projects accomplished through education efforts will restore 9,000 feet of shoreline or streambank areas.

D. Monitor progress

1. The proportion of restoration actions funded through the Aquatic Lands Enhancement Account and the Salmon Recovery Funding Board that incorporate project-specific effectiveness monitoring and formal adaptive management reaches 80 percent by the end of the biennium.

Priority 7: Conserve and recover orca, salmon, forage fish and groundfish


Center for Whale Research

Long-term goal: Achieve balanced, stable and self-sustaining populations of all indigenous marine species in Puget Sound.

The Issues

The Puget Sound Action Team has identified conserving and recovering declining species of orca, salmon, forage fish, and groundfish as a priority, recognizing that depletions of these aquatic species may signal a more serious ecosystem imbalance.

Federal and state laws require special protection efforts and recovery plans to conserve and recover species at risk of extinction. Because several recovery plans with different goals will be implemented during the 2005-2007 biennium, Action Team partners will work together to coordinate activities among the various recovery plans. *All of the efforts underway for other strategic Puget Sound priorities (see priorities 1 through 6) to clean up and prevent pollution and to improve habitats will benefit orca, salmon, forage fish, groundfish and other species*, but additional actions identified in species recovery plans will accelerate that recovery.

Orca

Orca (*Orcinus orca*)—or killer whales—are the world's largest dolphins. Several different populations of killer whales visit Puget Sound and the Strait of Juan de Fuca. Transient killer whales prey on seals and other marine mammals, travel widely in small groups and are part of a widespread population. The Northern Resident killer whales are fish-eaters that travel in pods and spend much of their time in British Columbia but occasionally enter Washington waters. The most common visitors to Washington are the Southern Resident killer whales that spend their summers in transboundary waters around the San Juan Islands and may travel throughout the Sound at other times of the year.

Canada has listed both the Northern and Southern Resident whales under their Species at Risk Act. NOAA Fisheries has designated the Southern Resident whales as depleted under the Marine Mammal Protection Act. The Washington Fish and Wildlife Commission in April 2004 voted to add to the state list of endangered species all killer whales that visit Washington waters.

The total population of the three pods (known as J, K and L) of Southern Resident whales was 83 in the summer of 2004. This is up from a low of 80 in 2001 but below a recent peak of 98 whales in 1995. *Factors thought to be contributing to the decline are poor availability of prey, toxic contamination, human disturbance, and altered number and distribution of breeding animals because of past captures.*

The key prey for the Southern Residents are salmon, and the numbers of adult salmon available to orca are determined by factors such as freshwater and nearshore habitat conditions, open ocean habitat conditions, fishing decisions, and hatchery decisions. Nearshore habitat is also crucial for the forage fish that are prey for whales and feed for salmon. Toxic

contamination in Puget Sound moves up in the food web and ultimately into the bodies of orca. Human disturbance can occur from private vessels and commercial whale watching boats.

Salmon

In 1999, NOAA Fisheries listed Puget Sound chinook and Hood Canal summer chum salmon as threatened under the federal Endangered Species Act (ESA). Puget Sound stocks of Bull Trout were also listed as threatened under the ESA by the U.S. Fish and Wildlife Service. *The causes of salmon declines have been broadly categorized as habitat destruction, harvest management, hatchery management and hydropower projects*.

The ESA listings triggered an aggressive salmon and watershed recovery response, outlined in the 1999 *Statewide Strategy to Recover Salmon: Extinction is Not an Option* developed by the Joint Natural Resources Cabinet. The state legislature in 1998 enacted the Watershed Planning Act, creating local planning units to decide the actions needed to provide adequate water for people and fish as well as healthy watersheds. The Salmon Recovery Act funded local lead entities to coordinate salmon restoration and recommend projects to the Salmon Recovery Funding Board for approval according to restoration strategies for each watershed. The act also initiated for each watershed an analyses of factors limiting salmon recovery led by the Conservation Commission. The Puget Sound Shared Salmon Strategy, a public and private partnership, is coordinating the development of a salmon recovery plan for Puget Sound to be delivered to NOAA Fisheries in June 2005 with implementation beginning thereafter.

Forage Fish

Several important species of forage fish such as surf smelt, sand lance, and Pacific herring that live and spawn on the shoreline or in the shallow marine waters of Puget Sound are the focus of management plans to address recent declines. Surf smelt and sand lance spawn high up on beaches, usually above the ordinary high water mark. Herring spawn in the eelgrass beds in clear, shallow nearshore waters. Forage fish and their eggs are critical prey for a large variety of marine life including fish, birds, and marine mammals. Migrating salmon rely on forage fish as they travel to and from the Pacific Ocean.

Pacific herring stocks declined sharply in the north Sound and Strait of Juan de Fuca in the late 1990s, although there were slight increases in the central and south Sound stocks. Disease and warm water stress have been suggested as possible causes for declines in the Cherry Point population of herring. *In August 2004, NOAA Fisheries announced it will review the population status of Cherry Point herring and consider listing them under the ESA.* Dredging, pollution and shading of nearshore waters can remove or diminish eelgrass beds that herring use as spawning habitat. Inventories of surf smelt and sand lance spawning areas by the Washington Department of Fish and Wildlife (WDFW) and others suggest that extensive shoreline modification of Puget Sound has significantly reduced these habitat areas. As part of a statewide inventory of saltwater shorelines, scientists at the Department of Natural Resources (DNR) found that approximately one-third of all saltwater shorelines in Puget Sound have some kind of shoreline modification structure, such as a bulkhead or seawall. These “hard” armoring structures and loss of shoreline vegetation damage or destroy the habitat for surf smelt and sand lance spawning. Past and ongoing development pressures on the shoreline continue to threaten this fragile yet critical part of the ecosystem.

Groundfish

Groundfish, and rockfish in particular, have declined along the entire west coast of the United States, including Puget Sound. In some cases, this decline may be the result of changes in water temperature, especially for migratory species such as Pacific cod, hake and walleye pollock. Rockfish, on the other hand are generally not migratory, but have fidelity to the site where they settle out as larvae. They are

susceptible to fishing pressure, partly because they do not move, and in addition because they are opportunistic and non-discriminating feeders. The strongest suspected cause of decline is associated with both sport and commercial fishing.

Some of the 18 species of groundfish in Puget Sound were petitioned for listing as threatened or endangered under the federal Endangered Species Act, a petition that was denied in 2000 by the National Marine Fisheries Service (now NOAA Fisheries). However, the federal agency concluded that state authorities should impose stronger conservation measures and target meaningful recovery efforts. WDFW is completing a review of status and trends of several species of rockfish to inform the Washington Fish and Wildlife Commission regarding options for conservation approaches in 2005.

Action Team Partnership's Proposed Strategy for 2005-2007

1. Achieve significant progress on priorities 1 through 6 of this document for overall ecosystem protection and recovery to support recovery of these species.
2. Implement actions required in species recovery plans, provide technical guidance and support to local implementers, and participate in addressing regional needs for monitoring and adaptive management.
3. Help coordinate implementation of recovery plans to avoid unnecessary duplication and to leverage opportunities among the various recovery plans.
4. In anticipation of completion of a rockfish conservation plan, support regulatory and voluntary tools for rockfish recovery.

Desired Results for Conserving and Recovering Orca, Salmon, Forage Fish, and Groundfish in 2005-2007

A. Orca recovery plans are completed and implementation begun
   1. WDFW completes an orca recovery plan with specified management actions and implementation of Action Team partner agency activities occurs on the schedule identified in the plan.
   2. Action Team partner agencies participate in the development and implementation of orca recovery plans developed by NOAA Fisheries and Canada's Department of Fisheries and Oceans.

B. Salmon recovery plan is implemented
   1. Action Team agencies implement the habitat management activities identified for them in the Shared Strategy for Puget Sound's salmon recovery plan.
   2. Hatchery reforms identified by the Hatchery Scientific Review Group and, where appropriate, approved by NOAA Fisheries, are implemented.
   3. Harvest is executed in compliance with the ESA.
   4. Re-licensing of hydropower projects is consistent with salmon recovery goals.

C. Marine fish are protected
   1. Healthy stocks of forage fish are maintained by implementing WDFW's Forage Fish Management Plan.
   2. Forage fish stock and habitat information is available in geographic information system (GIS) format and is accessible to the public.
   3. Direct and indirect harvest impacts on rockfish are minimized.

D. Habitat conservation plans are developed by DNR
   1. Strategies are developed through a habitat conservation planning effort to reduce impacts to listed species on state-owned aquatic lands.
   2. A low-effect habitat conservation plan is completed for geoduck wild stock harvest.

E. The public is informed and involved
   1. Research related to conserving and recovering species at risk, especially research in nearshore habitat and food web issues, is transferred to federal, state, tribal and local governments and citizens.

F. Monitor progress
   1. Status and trends monitoring continues to track recovery of threatened orca, salmon, groundfish, and forage fish populations.

The Role of Science in Puget Sound Conservation and Recovery in 2005-2007


Department of Ecology

Long-term goal: Assess the health of Puget Sound and its resources and communicate information to promote informed choices for the environmental management of Puget Sound.

The Issues

Science is a foundation for the Action Team partnership's efforts to conserve and recover Puget Sound. Scientific results developed through the broad and substantial efforts of scientists from numerous federal, state, local and tribal governments, universities, colleges, environmental organizations and citizen groups help the Action Team partnership understand the workings of the Puget Sound ecosystem and assess the influence of humans in the ecosystem. Some scientific investigations, such as long-term monitoring, help detect both natural and human-caused changes in the ecosystems and measure the effectiveness of our management activities. Other types of investigations can help uncover cause-and-effect relationships that can be useful in directing management actions. The use of scientific results is possible only as scientific information is communicated to decision makers, citizens and other stakeholders to help inform their work to protect and restore Puget Sound.

Action Team Partnership's Proposed Strategy for 2005-2007

1. Conduct Puget Sound research and monitoring activities to improve the scientific understanding of the Puget Sound ecosystem and evaluate the effectiveness of environmental resource management programs.
2. Expand the knowledge base of Puget Sound science through collaborations of partner agencies with academic and scientific institutions, local and tribal governments, and citizen monitoring groups. Coordinate these interdisciplinary efforts to ensure consistencies and efficiencies in data management and protocols for sampling and analysis.
3. Provide information to citizens, government leaders, and resource managers to help them improve efforts to protect and restore Puget Sound.

Desired Results for Continued Efforts in Monitoring and Research in 2005-2007

1. Apply scientific findings to evaluate the effectiveness of management activities and suggest adaptations and refinements to strategies to ensure that the stated goals for Puget Sound priorities and programs are achieved.
2. Apply information on the status and trends of forage fish, groundfish, marine birds, seagrasses, and other select species to help guide conservation and recovery activities.
3. Identify threats to human health from marine environmental conditions such as harmful algal blooms, domoic acid, paralytic shellfish poisoning, and other water contaminants.

4. Identify threats to human and marine wildlife health from exposure to toxic contaminants in the marine food web.
5. Disseminate research and monitoring results to managers via publications in primary research and technical literature, Puget Sound Action Team staff newsletters, meetings/workshops, and the 2007 Puget Sound Georgia Basin Research Conference.
6. Provide data from the Puget Sound Ambient Monitoring Program (PSAMP) and other research efforts in easy-to-use formats to scientists, planners, educators and managers so that they may use and benefit from the findings.
7. Use scientific data to identify and set priorities for emerging issues (e.g., toxic contamination, water quality degradation, habitat changes) in order to:
    a. Focus development of new research partnerships to address important and/or urgent questions.
    b. Refer issues to appropriate management authorities for rapid response to significant environmental changes.
8. Apply predictive models and assessment tools, including models that help predict the fate and transport of contaminants through the food web, to help guide restoration and protection actions for Puget Sound processes, habitats and species.
9. Provide technical assistance in sampling and analysis procedures, protocols and guidelines to governments, community groups and other scientists to help generate consistent, high quality and scientifically sound data about Puget Sound.
10. Implement the Intensively Monitored Watershed Program to investigate cause-and-effect relationships in select watersheds and estuaries.

Glossary of Planning Terms

2005-2007 Puget Sound Conservation and Recovery Plan: A biennial work plan for the Puget Sound Action Team partnership. The work plan combines the June 2004 adopted *2005-2007 Puget Sound Priorities, Strategies and Results* document with proposed budget information and activities submitted by state agencies and university programs in September 2004. The Action Team chair will submit the approved work plan to the governor and the legislature. The plan does not include everything done by the state government in Puget Sound, nor does it attempt to roll up all federal, local and tribal government, and non-governmental organization implementation actions.

2005-2007 Puget Sound Priorities, Strategies and Results: The June 2004 document established the priorities, strategies, and desired results for the *2005-2007 Puget Sound Conservation and Recovery Plan* and provided guidance for agencies and university programs in planning activities and budget proposals that are focused on achieving progress on the priorities during the July 1, 2005 to June 30, 2007 biennial budget period.

Priority: The priorities break down the goals of the long-term *Puget Sound Water Quality Management Plan* into smaller, more specific pieces that focus the partnership on the objectives that are the most important to work on together during the 2005-2007 biennium, based on an assessment of the existing threats and opportunities in Puget Sound.

Long-term goal: For each priority this is an environmental condition or outcome that represents a significant aspect of resolving the problem over a time period that extends beyond the two-year budget period.

Strategies: For each priority these are the key methods or approaches that describe how the partnership will achieve progress on the priority during the two-year budget period.

Desired results: Each priority includes desired results that Action Team partners have identified along with measures of progress they are committed to achieve, depending on funding they receive under the proposed budget. If funded, the partnership will use these as "expected" results and measures to track and report their progress on each priority to the public, the governor and the legislature during and at the end of the two-year work plan period.

Activity: An activity is something an agency does to accomplish goals and make progress on priorities. It consumes resources and helps produce desired results. An activity produces specific results that can be products, services or outcomes.

Proposed Budget for the 2005-2007 Puget Sound Conservation and Recovery Plan

Tables 1, 2, 3, 4a, and 4b on the following pages present the information on budgets proposed by state agencies and university education programs for implementing the *2005-2007 Puget Sound Conservation and Recovery Plan.*

Key To Budget Table Information

Budget Code: A budget code is assigned by agencies to a programmatic or topical division of agency funds in the work plan. Funding under each budget code identifies activities or a program that supports one or more related priorities and results in the work plan.

Title: Short descriptive title of the budget activity.

Carry Forward Level Proviso Funds: Funds appropriated as a proviso by the legislature, specifically designated to implement the Puget Sound work plan during the 2003-2005 biennium that are carried forward in proposed budgets for 2005-2007.

Other Continuing Funding: Non-proviso funds carried forward from the 2003-2005 biennium that agencies are voluntarily reporting on to the Action Team so that Puget Sound benefits can be tracked.

Proposed Enhancements for 2005-2007: Proposed increases in funding by state agencies for the 2005-2007 biennium.

Total: The total amount of funds proposed as carry forward proviso funds, continuing non-proviso funds, and proposed enhancements for 2005-2007 for each budget code.

Fund: The source of the funds (see list below).

Codes for Funding Sources:

GF-S .....General Fund-State
GF-F.....General Fund-Federal
GF-F Capital .....General Fund-Federal
GF-P/L.....General Fund-Private Local
ALEA.....Aquatic Lands Enhancement Account
WQPF.....Water Quality Permit Fees
MVF .....Motor Vehicle Fund - Federal
STCA.....State Toxic Control Account
OSPA.....Oil Spill Prevention Account
WQA .....Water Quality Account
FAWA .....Freshwater Aquatic Weed Account
WQA-Capital.....Water Quality Account-Capital
HWAA .....Hazardous Waste Assistance Account
VRA.....Vessel Response Account
PS .....Recreational Fish Enhancement Account

Table 1. 2005-2007 Proposed Budget by Agency

Agency	Operating vs. Capital Funds	Carry Forward Level of Proviso Funding	Other Continuing Funding	Proposed Enhancements	Total	Total Proposed Proviso Funding
Agriculture	Operating	$74,000			$74,000	$74,000
Community, Trade and Economic Development	Operating	$123,000			$123,000	$123,000
Conservation Commission	Operating	$494,000			$494,000	$494,000
	Capital	$840,000			$840,000	$840,000
	Total	$1,334,000			$1,334,000	$1,334,000
Ecology	Operating	$12,993,417	$12,825,975		$25,819,392	$12,993,417
Fish and Wildlife	Operating	$3,113,427	$400,000	$1,961,573	$5,475,000	$5,075,000
Health	Operating	$2,675,000	$676,000	63,928	$3,414,928	$2,738,928
Natural Resources*	Operating	$1,342,950		$741,300	$2,084,250	$1,688,050
Puget Sound Action Team	Operating	$5,035,400		$1,325,000	$6,360,400	$6,360,400
Parks and Recreation Commission	Operating	$191,000	$75,000		$266,000	$191,000
	Capital		$450,000		$450,000	
	Total	$191,000	$525,000		$716,000	$191,000
Transportation	Operating		$75,377,400		$75,377,400	
University of Washington	Operating	$470,000		$47,000	$517,000	$517,000
Washington State University	Operating	$331,000		$89,000	$420,000	$420,000
All Agencies Operating		$26,843,194	$89,354,375	$4,227,801	$120,425,370	$30,674,795
All Agencies Capital		$840,000	$450,000		$1,290,000	$840,000
TOTAL All Agencies		**$27,683,194**	**$89,804,375**	**$4,227,801**	**$121,715,370**	**$31,514,795**

***Note for Natural Resources**: A proposed adjustment of $396,200 for Aquatic Reserves management plans under DNR-05 is included in Proposed Enhancements but is not recommended as a proviso and is not included in Total Proposed Proviso Funding.

Table 2. Proposed 2005-2007 Budget Codes by Agency

Budget Code	Title	Carry Forward Levels of Proviso Funding	Other Continuing Funding	Proposed Enhancements	Total
▶ **DEPARTMENT OF AGRICULTURE**					
WSDA-01	Pesticide technical assistance	$74,000			$74,000
Total	**Department of Agriculture**	**$74,000**			**$74,000**
▶ **DEPARTMENT OF COMMUNITY, TRADE AND ECONOMIC DEVELOPMENT**					
CTED-01	Technical assistance for local planning	$123,000			$123,000
Total	**Department of Community, Trade and Economic Development**	**$123,000**			**$123,000**
▶ **CONSERVATION COMMISSION**					
CC-01	Technical assistance and funding for Puget Sound Conservation Districts for their water quality projects	$494,000			$494,000
CC-02	Implementation of Puget Sound Conservation District water quality projects	$840,000			$840,000
Total	**Conservation Commission**	**$1,334,000**			**$1,334,000**
▶ **DEPARTMENT OF ECOLOGY**					
DOE-01	Ambient monitoring and laboratory certification	$4,065,692			$4,065,692
DOE-02	Wastewater discharge permits	$3,826,188			$3,826,188
DOE-03	Watershed assistance		$3,904,000		$3,904,000
DOE-04	Nonpoint source pollution	$1,281,847			$1,281,847
DOE-06	Stormwater program	$1,400,000	$391,072		$1,791,072
DOE-07	Contaminated sediments and dredging	$1,190,000			$1,190,000
DOE-08	Wetland protection and restoration	$524,690			$524,690
DOE-09	Oil spills prevention and response	$705,000	$4,276,000		$4,981,000
DOE-10	Aquatic nuisance species		$89,903		$89,903
DOE-11	Shoreline Management Act		$2,245,000		$2,245,000
DOE-12	Northwest Straits Commission		$1,500,000		$1,500,000
DOE-13	Persistent Bioaccumulative Toxin (PBT) Strategy		$150,000		$150,000
DOE-14	Technical Resources for Engineering Efficiency (TREE)		$270,000		$270,000
Total	**Department of Ecology**	**$12,993,417**	**$12,825,975**		**$25,819,392**

Budget Code	Title	Carry Forward Levels of Proviso Funding	Other Continuing Funding	Proposed Enhancements	Total
▶ **DEPARTMENT OF FISH AND WILDLIFE**					
DFW-01	Long-term monitoring of Puget Sound marine birds and waterfowl	$175,000			$175,000
DFW-02	Soundwide technical assistance for water quality and habitat	$150,000			$150,000
DFW-03	Local watershed technical assistance for water quality and habitat	$650,000			$650,000
DFW-04	Aquatic Nuisance Species And Ballast Water Program	$170,000			$170,000
DFW-05	Puget Sound Marine Fish Recovery	$680,000			$680,000
DFW-06	Deschutes Estuary Feasibility Study - Early Action Project	$222,000			$222,000
DFW-07	Orca Conservation, Recovery and Monitoring			$300,000	$300,000
DFW-08	Forage Fish Spawning Habitat Inventory Project	$350,000			$350,000
DFW-09	Census of Burrow-nesting Seabirds in Puget Sound	$150,000			$150,000
DFW-10	SalmonScape Application for Forage Fish	$30,000			$30,000
DFW-11	Burlington Northern Railroad - Early Action Projects Feasibility	$100,000			$100,000
DFW-12	Puget Sound Nearshore Restoration Project	$108,427		$291,573	$400,000
DFW-13	Puget Sound technical assistance: Environmental Engineering			$170,000	$170,000
DFW-14	Ecoregional Assessment Implementation - Assistance to Counties			$400,000	$400,000
DFW-15	Puget Sound Marine Fish Recovery			$800,000	$800,000
DFW-16	Fish Contaminant Monitoring	$328,000	$400,000		$728,000
Total	**Department of Fish and Wildlife**	**$3,113,427**	**$400,000**	**$1,961,573**	**$5,475,000**
▶ **DEPARTMENT OF HEALTH**					
DOH-01	Monitoring, data management and reporting	$464,800		$3,050	$467,850
DOH-02	Protection and restoration of shellfish beds	$936,300		$17,000	$953,300
DOH-03	Recreational shellfish program		$676,000	$13,000	$689,000
DOH-04	On-site sewage management	$1,273,900		$30,878	$1,304,778
Total	**Department of Health**	**$2,675,000**	**$676,000**	**$63,928**	**$3,414,928**

Table 2 continued

Budget Code	Title	Carry Forward Levels of Proviso Funding	Other Continuing Funding	Proposed Enhancements	Total
▶ **DEPARTMENT OF NATURAL RESOURCES**					
DNR-01	Nearshore habitat monitoring	$1,306,950		$345,100	$1,652,050
DNR-02	Management of wetlands	$36,000			$36,000
DNR-05	Aquatic Reserves management			$396,200	$396,200
Total	**Department of Natural Resources**	**$1,342,950**		**$741,300**	**$2,084,250**
▶ **STATE PARKS AND RECREATION COMMISSION**					
PRC-01	Marinas and recreational boating facility grants		$450,000		$450,000
PRC-02	Boater education and public involvement	$191,000	$75,000		$266,000
Total	**State Parks and Recreation Commission**	**$191,000**	**$525,000**		**$716,000**
▶ **DEPARTMENT OF TRANSPORTATION**					
DOT-01	Stormwater		$48,750,000		$48,750,000
DOT-02	Contaminated sediments		$381,000		$381,000
DOT-03	Wetlands		$19,000,000		$19,000,000
DOT-04	Habitat		$7,246,400		$7,246,400
Total	**Department of Transportation**		**$75,377,400**		**$75,377,400**
▶ **UNIVERSITY OF WASHINGTON**					
UW-01	Water quality agents	$300,000		$30,000	$330,000
UW-02	Oil spill prevention education (Ecology pass through)	$170,000		$17,000	$187,000
Total	**University of Washington**	**$470,000**		**$47,000**	**$517,000**
▶ **WASHINGTON STATE UNIVERSITY**					
WSU-01	Water quality agents	$331,000		$89,000	$420,000
Total	**Washington State University**	**$331,000**		**$89,000**	**$420,000**

Budget Code	Title	Carry Forward Levels of Proviso Funding	Other Continuing Funding	Proposed Enhancements	Total
▶ **PUGET SOUND ACTION TEAM**					
PSAT-01	Coordinate the work of the Puget Sound Action Team Partnership and Council for Puget Sound conservation and recovery	$507,100			$507,100
PSAT-02	Provide technical assistance and policy guidance to achieve progress on the Partnership's environmental priorities	$1,432,400		$25,000	$1,457,400
PSAT-03	Conduct outreach and provide technical assistance to Puget Sound communities to achieve progress on environmental priorities	$1,320,800			$1,320,800
PSAT-04	Inform and engage people to make progress on environmental priorities	$712,300			$712,300
PSAT-05	Coordinate, communicate and facilitate the use of Puget Sound science	$362,800			$362,800
PSAT-06	Distribute Public Involvement and Education (PIE) funding for community-based education and involvement	$700,000		$300,000	$1,000,000
PSAT-07	Develop and provide funds for corrective actions to address Hood Canal's dissolved oxygen problems			$1,000,000	$1,000,000
Total	**Puget Sound Action Team**	**$5,035,400**		**$1,325,000**	**$6,360,400**
Total	**All Agencies. All Funds**	**$27,683,194**	**$89,804,375**	**$4,227,801**	**$121,715,370**

Table 3. Proposed Detailed Budget by Agency and Funding Source

Budget Code	Title	Carry Forward Levels of Proviso Funding	Other Continuing Funding	Proposed Enhance-ments	Total	Fund
▶ **DEPARTMENT OF AGRICULTURE**						
WSDA-01	Pesticide technical assistance	$74,000			$74,000	GF-S
Total	**Department of Agriculture**	**$74,000**			**$74,000**	**GF-S**
▶ **DEPARTMENT OF COMMUNITY, TRADE AND ECONOMIC DEVELOPMENT**						
CTED-01	Technical assistance for local planning	$123,000			$123,000	GF-S
Total	**Department of Community, Trade and Economic Development**	**$123,000**			**$123,000**	**GF-S**
▶ **CONSERVATION COMMISSION**						
CC-01	Technical assistance and funding for Puget Sound Conservation Districts for their water quality projects	$494,000			$494,000	GF-S
CC-02	Implementation of Puget Sound Conservation District water quality projects	$840,000			$840,000	WQA Capital
Total	**Conservation Commission**	**$1,334,000**			**$1,334,000**	
▶ **DEPARTMENT OF ECOLOGY**						
DOE-01	Ambient monitoring and laboratory certification	$3,280,886			$3,280,886	GF-S
		$540,806			$540,806	WQA
		$244,000			$244,000	GF-F
DOE-02	Wastewater discharge permits	$77,968			$77,968	GF-S
		$3,748,220			$3,748,220	WQPF
DOE-03	Watershed assistance		$3,904,000		$3,904,000	WQA
DOE-04	Nonpoint source pollution	$970,150			$970,150	GF-S
		$311,697			$311,697	GF-S
DOE-06	Stormwater program	$1,400,000	$391,072		$1,791,072	STCA
DOE-07	Contaminated sediments and dredging	$1,181,000			$1,181,000	STCA
		$9,000			$9,000	GF-F
DOE-08	Wetland protection and restoration	$411,690			$411,690	GF-S
		$113,000			$113,000	GF-F
DOE-09	Oil spills prevention and response	$705,000	$800,000		$1,505,000	OSPA
			$600,000		$600,000	STCA
			$2,876,000		$2,876,000	VRA
DOE-10	Aquatic nuisance species		$45,053		$45,053	FAWA
			$44,850		$44,850	STCA
DOE-11	Shoreline Management Act		$1,927,000		$1,927,000	GF-S
			$318,000		$318,000	GF-F
DOE-12	Northwest Straits Commission		$1,500,000		$1,500,000	GF-F

Budget Code	Title	Carry Forward Levels of Proviso Funding	Other Continuing Funding	Proposed Enhance-ments	Total	Fund
DOE-13	Persistent Bioaccumulative Toxin (PBT) Strategy		$150,000		$150,000	STCA
DOE-14	Technical Resources for Engineering Efficiency (TREE)		$170,000		$170,000	HWAA
			$100,000		$100,000	STCA
Subtotal	Department of Ecology				$6,979,391	GF-S
Subtotal	Department of Ecology				$2,184,000	GF-F
Subtotal	Department of Ecology				$1,505,000	OSPA
Subtotal	Department of Ecology				$4,444,806	WQA
Subtotal	Department of Ecology				$45,053	FAWA
Subtotal	Department of Ecology				$3,866,922	STCA
Subtotal	Department of Ecology				$170,000	HWAA
Subtotal	Department of Ecology				$2,876,000	VRA
Subtotal	Department of Ecology				$3,748,220	WQPF
Total	**Department of Ecology**	**$12,993,417**	**$12,825,975**		**$25,819,392**	
▶ **DEPARTMENT OF FISH AND WILDLIFE**						
DFW-01	Long-term monitoring of Puget Sound marine birds and waterfowl	$175,000			$175,000	GF-S
DFW-02	Soundwide technical assistance for water quality and habitat	$150,000			$150,000	GF-S
DFW-03	Local watershed technical assistance for water quality and habitat	$650,000			$650,000	GF-S
DFW-04	Aquatic nuisance species and ballast water program	$170,000			$170,000	GF-S
DFW-05	Puget Sound Marine Fish Recovery	$680,000			$680,000	GF-S
DFW-06	Deschutes Estuary Feasibility Study - Early Action Project	$222,000			$222,000	GF-S
DFW-07	Orca Conservation, Recovery and Monitoring			$300,000	$300,000	GF-S
DFW-08	Forage Fish Spawning Habitat Inventory Project	$350,000			$350,000	GF-S
DFW-09	Census of Burrow-nesting Seabirds in Puget Sound	$150,000			$150,000	GF-S
DFW-10	SalmonScape Application for Forage Fish	$30,000			$30,000	GF-S
DFW-11	Burlington Northern Railroad - Early Action Projects Feasibility	$100,000			$100,000	GF-S
DFW-12	Puget Sound Nearshore Restoration Project	$108,427		$291,573	$400,000	GF-S
DFW-13	Puget Sound Technical Assistance: Environmental Engineering			$170,000	$170,000	GF-S
DFW-14	Ecoregional Assessment Implementation - Assistance to Counties			$400,000	$400,000	GF-S
DFW-15	Puget Sound Marine Fish Recovery			$800,000	$800,000	GF-S

Table 3 continued

Budget Code	Title	Carry Forward Levels of Proviso Funding	Other Continuing Funding	Proposed Enhance-ments	Total	Fund
DFW-16	Fish contaminant monitoring	$328,000			$328,000	GF-S
			$200,000		$200,000	PS
			$200,000		$200,000	GF-F
Subtotal	Department of Fish and Wildlife				$5,075,000	GF-S
Subtotal	Department of Fish and Wildlife				$200,000	PS
Subtotal	Department of Fish and Wildlife				$200,000	GF-F
Total	**Department of Fish and Wildlife**	**$3,113,427**	**$400,000**	**$1,961,573**	**$5,475,000**	
▶ **DEPARTMENT OF HEALTH**						
DOH-01	Monitoring, data management and reporting	$464,800		$3,050	$467,850	GF-S
DOH-02	Protection and restoration of shellfish beds	$936,300		$17,000	$953,300	GF-S
DOH-03	Recreational shellfish program		$676,000	$13,000	$689,000	GF-P/L
DOH-04	On-site sewage management	$1,273,900		$30,878	$1,304,778	GF-S
Subtotal	Department of Health				$2,725,928	GF-S
Subtotal	Department of Health				$689,000	GF-P/L
Total	**Department of Health**	**$2,675,000**	**$676,000**	**$63,928**	**$3,414,928**	
▶ **DEPARTMENT OF NATURAL RESOURCES**						
DNR-01	Nearshore habitat monitoring	$1,306,950		$345,100	$1,652,050	ALEA
DNR-02	Management of wetlands	$36,000			$36,000	GF-S
DNR-03	Puget Sound Dredged Disposal Analysis (No work plan funding proposed)					
DNR-05	Aquatic Reserves management			$396,200	$396,200	ALEA
Subtotal	Department of Natural Resources				$2,048,250	ALEA
Subtotal	Department of Natural Resources				$36,000	GF-S
Total	**Department of Natural Resources**	**$1,342,950**		**$741,300**	**$2,084,250**	
▶ **PARKS AND RECREATION COMMISSION**						
PRC-01	Marinas and recreational boating facility grants		$450,000		$450,000	GF-F Capital
PRC-02	Boater education and public involvement	$191,000			$191,000	ALEA
			$75,000		$75,000	GF-F
Subtotal	Parks and Recreation Commission				$191,000	ALEA
Subtotal	Parks and Recreation Commission				$75,000	GF-F
Subtotal	Parks and Recreation Commission				$450,000	GF-F Capital
Total	**State Parks and Recreation Commission**	**$191,000**	**$525,000**		**$716,000**	

Budget Code	Title	Carry Forward Levels of Proviso Funding	Other Continuing Funding	Proposed Enhance-ments	Total	Fund
▶ DEPARTMENT OF TRANSPORTATION						
DOT-01	Stormwater		$48,750,000		$48,750,000	MVF
DOT-02	Contaminated sediments		$381,000		$381,000	MVF
DOT-03	Wetlands		$19,000,000		$19,000,000	MVF
DOT-04	Habitat		$7,246,400		$7,246,400	MVF
Total	**Department of Transportation**		**$75,377,400**		**$75,377,400**	
▶ UNIVERSITY OF WASHINGTON						
UW-01	Water quality agents	$300,000		$30,000	$330,000	GF-S
UW-02	Oil spill prevention education (Ecology pass through)	$170,000		$17,000	$187,000	OSPA
Total	**University of Washington**	**$470,000**		**$47,000**	**$517,000**	
▶ WASHINGTON STATE UNIVERSITY						
WSU-01	Water quality agents	$331,000		$89,000	$420,000	GF-S
Total	**Washington State University**	**$331,000**		**$89,000**	**$420,000**	**GF-S**
▶ PUGET SOUND ACTION TEAM						
PSAT-01	Coordinate the work of the Puget Sound Action Team Partnership and Council for Puget Sound conservation and recovery	$373,100			$373,100	WQA
		$134,000			$134,000	GF-F
PSAT-02	Provide technical assistance and policy guidance to achieve progress on the Partnership's environmental priorities	$1,053,900			$1,053,900	WQA
		$378,500			$378,500	GF-F
				$25,000	$25,000	GF-S
PSAT-03	Conduct outreach and provide technical assistance to Puget Sound communities to achieve progress on environmental priorities	$971,800			$971,800	WQA
		$349,000			$349,000	GF-F
PSAT-04	Inform and engage people to make progress on environmental priorities	$524,100			$524,100	WQA
		$188,200			$188,200	GF-F
PSAT-05	Coordinate, communicate and facilitate the use of Puget Sound science	$266,900			$266,900	WQA
		$95,900			$95,900	GF-F
PSAT-06	Distribute Public Involvement and Education (PIE) funding for community-based education and involvement	$700,000		$300,000	$1,000,000	WQA
PSAT-07	Develop and provide funds for corrective actions to address Hood Canal's low dissolved oxygen problems			$500,000	$500,000	GF-S
				$500,000	$500,000	GF-F
Subtotal	Puget Sound Action Team				$1,645,600	GF-F
Subtotal	Puget Sound Action Team				$4,189,800	WQA
Subtotal	Puget Sound Action Team				$525,000	GF-S
Total	**Puget Sound Action Team**	**$5,035,400**		**$1,325,000**	**$6,360,400**	

Table 3 continued

Budget Code	Title	Carry Forward Levels of Proviso Funding	Other Continuing Funding	Proposed Enhance-ments	Total	Fund
Subtotal	All Agencies GF-S	$12,198,818	$1,927,000	$2,656,501	$16,782,319	
Subtotal	All Agencies GF-F	$1,511,600	$2,093,000	$500,000	$4,104,600	
Subtotal	All Agencies GF-F Capital		$450,000		$450,000	
Subtotal	All Agencies ALEA	$1,497,950		$741,300	$2,239,250	
Subtotal	All Agencies WQPF	$3,748,220			$3,748,220	
Subtotal	All Agencies MVF-Federal		$75,377,400		$75,377,400	
Subtotal	All Agencies STCA	$2,581,000	$1,285,922		$3,866,922	
Subtotal	All Agencies OSPA	$875,000	$800,000	$17,000	$1,692,000	
Subtotal	All Agencies WQA	$4,430,606	$3,904,000	$300,000	$8,634,606	
Subtotal	All Agencies FAWA		$45,053		$45,053	
Subtotal	All Agencies VRA		$2,876,000		$2,876,000	
Subtotal	All Agencies HWAA		$170,000		$170,000	
Subtotal	All Agencies GF-P/L		$676,000	$13,000	$689,000	
Subtotal	All Agencies WQA Capital	$840,000			$840,000	
Subtotal	All Agencies PS		$200,000		$200,000	
Total	**All Agencies. All Funds**	**$27,683,194**	**$89,804,375**	**$4,227,801**	**$121,715,370**	

Table 4a: Puget Sound 2005-2007 Enhancement Requests by Funding Source

The Puget Sound Action Team and Puget Sound Council recommend funding all of the enhancement requests for Puget Sound, and approved the relative ranking shown below for enhancement requests from the Washington State's General Fund and the Water Quality Account.

Funding Source	Agency	Budget Code	Activity	Amount (dollars)	Puget Sound Action Team and Council Ranking
General Fund – State	Fish and Wildlife	DFW-07	Orca Conservation, Recovery, and Monitoring	300,000	4
		DFW-12	Puget Sound Nearshore Restoration Project	291,573	5
		DFW-13	Puget Sound Technical Assistance: Environmental Engineering	170,000	6
		DFW-14	Ecoregional Assessment Implementation – Assistance to counties	400,000	7
		DFW-15	Puget Sound Marine Fish Recovery	800,000	8
	Puget Sound Action Team Staff	PSAT-02	Ballast Water Committee staff support	25,000	9
		PSAT-07	Hood Canal Corrective Action Fund to address low dissolved oxygen problems	500,000	1
	Washington Sea Grant	UW-01	Water Quality Field Agents – Covers cost of inflation for two field agents	30,000	2
	WSU Extension	WSU-01	Water Quality Field Agents – Covers cost of inflation for three field agents	89,000	2
	Total General Fund State			**2,605,573**	
Water Quality Account – Operating	Puget Sound Action Team	PSAT-06	Public Involvement and Education (PIE) fund increase for community-based education projects	300,000	3
	Total Water Quality Account			**300,000**	
Aquatic Lands Enhancement Account	Natural Resources	DNR-01	Nearshore Habitat Monitoring – Expand eelgrass monitoring	345,100	Not ranked
		DNR-05 Non proviso	Aquatic Reserves Management – Funding to implement management plans	396,200	Not ranked
	Total Aquatic Lands Enhancement Account			**741,300**	
General Fund-Federal	Puget Sound Action Team	PSAT-07	Hood Canal Corrective Actions to address low dissolved oxygen problems	**500,000**	Not ranked
Oil Spill Prevention Account	Washington Sea Grant Program	UW-02	Oil Spill Prevention Education	**17,000**	Not ranked
	Total All Funding Sources			**4,163,873**	

Note: Enhancement requests listed above do not include:

1. Statewide enhancement requests (see Table 4b).
2. The adjustments provided by the Department of Health of $63,928 for costs incurred for relocation.

Table 4b: 2005-2007 Statewide Enhancement Requests with Benefits to Puget Sound

The enhancement requests listed below are submitted voluntarily by agencies for statewide programs that support the priorities and achieve the results of this work plan. These enhancement requests are not ranked and are not included in the proposed Puget Sound work plan budget (shown in Tables 1-3).

Agency	Budget Code	Proposed Activity	Budget Enhancement	Funding Source
Conservation Commission		Livestock Nutrient Management Tech Assistance/Project Design	$762,640	WQA- Operating
		Livestock Nutrient Management Landowner Cost-share	$3,007,600	WQA-Capital
		Conservation Reserve Enhancement Program Technical Assistance	$100,000	GF-S
		Conservation Reserve Enhancement Program Implementation	$4,000,000	SBCA-057
		Water Quality Implementation Grants to Conservation Districts	$500,000	WQA-Capital
Ecology	DOE-06	Stormwater Program – Implement changes in municipal and industrial stormwater permits in accordance with federal regulations (Phase II permits)	$198,000	General Fund- State
			$3,621,000	Water Quality – Private Fund
	DOE-13	PBT Strategy – Reduce persistent bioaccumulative toxins (PBTs) in the environment	$876,000	STCA
	DOE-11	Shoreline Management Act – Funding for local government grants for updating Shoreline Master Programs	$1,391,000	GF-S
Natural Resources	DNR-04	Seagrass Management Plan	$369,200	ALEA
Total Statewide Enhancement Requests			**$14,825,440**	